



US EPA, Region 9
NPDES/DMR, ENF-4-1
75 Hawthorne Street
San Francisco, CA 94105-3901
Attn: Eugene Bromley

August 23, 2016

Dear Mr. Bromley,

Subject: Produced Water Oil and Grease Exceedance Notification

The following letter is in response to a 24 hour verbal notification given to EPA on August 19, 2016 regarding a produced water discharge at Platform Elly (reference NRC Notification #1156753). As required in the General NPDES permit - CAG280000 the following is a written notification and explanation of (and/or potential) exceedance of the oil and grease limitations for produced water NPDES discharges:

Standard operating procedures on Platform Elly is to inject all of the produced water back into the oil producing reservoir. On rare occasions if the injection system fails, operators temporarily divert treated produce water to the emergency sump (U-06) and monitor the discharge as required under the NPDES Permit. This occurred on August 9, 2016 for approximately 14 minutes (from 2:38 am to 2:52 am) and an estimated total of 197 barrels of water was discharged to the ocean. The sample point where the oil and grease samples were collected was downstream of the produced water tank S-03 and prior to an emergency sump U-06. The emergency sump is located on the lower deck and extends to the ocean. It is a vertical pipe type structure used to capture and skim off any free oil that makes it to the sump. This sump is currently skimmed of any free oil twice per day. The sump extends -177 ft. and it was not possible to sample the water discharged at the bottom of the sump's outlet. Instead, the sample was collected upstream of the sump (which is technically the last treatment vessel) and may not necessarily be representative of the water that was actually discharged from the sump outlet. In either case a sample was collected during the discharge from the outlet of the S-03 produced water tank. It should also be noted that there was no reported sheen in the receiving water as a result of the discharge.

Data Results are as follows:

Date:	Time:	O&G (mg/l)
8/9/2016	2:38 am	15,300

System Review and Corrective Actions:

As soon as the lab data results were known, EPA was notified and there was a detailed review of the production treatment process. The apparent cause of the oil in the water was closely reviewed to determine what could prevent this from happening again. It was found that the treated produced



water holding tank (S-03) had been contaminated with oil from an oil dehydration system upset which allowed oil to enter the tank. This tank has limited skimming capability since it is designed as a surge tank for clean filtered produced water. Once the discharge began, it's likely that some of the oil pad that had built up in the tank made its way into the water phase causing the much higher than normal oil and grease levels.

Prior to any more discharges, the S-03 tank will be bypassed and cleaned. Any accumulated tank bottoms and oil will be removed and cleaned from the tank. Additionally an improved oil skimming mechanism will be installed to capture future upsets should they occur. Operations is also looking at installing a sample point in the sump whose additional skimming capabilities would result in a sample closer to the discharge point and more representative of the actual water discharged to the ocean.

At no time did we anticipate there to be any harm to human health or the environment as a result of the discharge.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions please contact me at (562) 628-1526.

Sincerely,

A handwritten signature in cursive script that reads 'Diana Lang'.

Diana Lang
HSE Manager
Beta Offshore